

AMENDMENTS TO THE CLAIMS

1. (Canceled).

2. (Currently Amended) ~~The process of Claim 1~~ A process of isolating an ergot alkaloid from ergot, the process comprising extraction of ergot with a mixture comprising toluene and ethanol to form a primary extract, wherein the concentration of ethanol in the mixture, comprises: toluene and is about 5-30% (v/v) of ethanol.

3. (Currently Amended) The process of Claim 2, wherein the concentration of ethanol in the mixture, comprises: toluene and is about 10-20% (v/v) of ethanol.

4. (Currently Amended) The process of Claim 2, wherein the ~~extracting~~ extraction is performed at a temperature of about 20-50°C.

5. (Currently Amended) The process of Claim 4, wherein the ~~extracting~~ extraction is performed at a about ambient temperature.

6. (Currently Amended) The process of Claim 2, wherein the ~~extracting~~ extraction is performed in a counter current way on a battery of percolators or on a continuous extractor.

7. (Currently Amended) The process of Claim 2, further comprising: ~~extracting~~ extraction of the primary extract with an aqueous solution of an acid to transfer the ergot alkaloid from the primary extract to an aqueous extract.

8. (Original) The process of Claim 7, wherein the aqueous solution of an acid is an aqueous solution of hydrochloric acid.

9. (Currently Amended) The process of Claim 8, wherein the aqueous solution of hydrochloric acid, comprises: about 30-60% (v/v) water, about 70-40% (v/v) ethanol, and about 0.05-1.0% (w/w) HCl.

10. (Currently Amended) The process of Claim 9, wherein the aqueous solution of hydrochloric acid, comprises: about 40-50% (v/v) water, about 60-50% (v/v) ethanol, and about 0.1-0.3% (w/w) HCl.

11. (Original) The process of Claim 8, further comprising: increasing the pH of the aqueous extract to above 7.0.

12. (Currently Amended) The process of Claim 11, wherein the increasing is performed by the addition of an aqueous sodium hydroxide solution ~~(w/w)~~.

13. (Original) The process of Claim 12, wherein the increasing is performed by the addition of a 5% aqueous sodium hydroxide solution (w/w).

14. (Currently Amended) The process of claim 11, further comprising: ~~extracting~~ extraction of the aqueous extract having a pH above 7.0 with toluene to transfer the ergot alkaloid from the aqueous solution and obtain a purified toluene extract.

15. (Currently Amended) The process of claim 14, further comprising: ~~partially evaporating partial extraction of the solvent~~ from the purified toluene extract to form crystalline ergot alkaloid.

16. (Original) The process of Claim 15, further comprising: separating the crystalline ergot alkaloid from the remaining toluene.

17. (Currently Amended) The process of Claim 15, further comprising: adding one or more C₅-C₈ aliphatic hydrocarbons to the ~~concentrate after product obtained by partial evaporation of~~ toluene to aid in crystallizing the ergot alkaloid.

18. (Original) The process of Claim 17, wherein the one or more aliphatic C₅-C₈ hydrocarbons are selected from hexane and heptane.

19. (Original) The process of Claim 18, wherein the one or more aliphatic C₅-C₈ hydrocarbons is hexane.

20. (Original) The process of Claim 17, further comprising: separating the crystalline ergot alkaloid from the toluene/aliphatic hydrocarbon mixture.

21. (Currently Amended) The process of Claim 20, ~~comprising isolating wherein the purity of crystalline ergot alkaloid in is~~ greater than 90% ~~purity~~.

22. (Currently Amended) A process of isolating an ergot alkaloid from ergot, the process comprising:

a. ~~extracting~~extraction of ergot with a mixture, comprising: toluene and ethanol to form a primary extract, wherein the concentration of ethanol in the mixture, comprises: toluene and is about 5-30% (v/v) ~~of ethanol;~~

b. ~~extracting~~extraction of the primary extract with an aqueous solution of an acid to transfer the ergot alkaloid from the primary extract to an aqueous extract;

c. increasing the pH of the aqueous extract to above 7.0;

d. ~~extracting~~extraction of the aqueous extract having a pH above 7.0 with toluene to transfer the ergot alkaloid from the aqueous solution and obtain a purified toluene extract;

e. partially evaporating the solvent from the purified toluene extract to form crystalline ergot alkaloid; and,

f. separating the crystalline ergot alkaloid from the remaining toluene.

23. (Currently Amended) A process of isolating an ergot alkaloid from ergot, the process comprising:

a. ~~extracting~~extraction of ergot with a mixture, comprising: toluene and ethanol to form a primary extract, wherein the concentration of ethanol in the mixture, comprises: toluene and is about 5-30% (v/v) ~~of ethanol;~~

b. ~~extracting~~extraction of the primary extract with an aqueous solution of an acid to transfer the ergot alkaloid from the primary extract to an aqueous extract;

c. increasing the pH of the aqueous extract to above 7.0;

d. ~~extracting~~extraction of the aqueous extract having a pH above 7.0 with toluene to transfer the ergot alkaloid from the aqueous solution and obtain a purified toluene extract;

e. partially evaporating the solvent from the purified toluene extract to form crystalline ergot alkaloid;

f. adding one or more C₅-C₈ aliphatic hydrocarbons to the ~~concentrate after product obtained by partial evaporation of~~ toluene to aid in crystallizing the ergot alkaloid; and,

g. separating the crystalline ergot alkaloid from the toluene/aliphatic hydrocarbon mixture.